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FORSKNINGSCENTER RISØ [DK/DK]; Frederiksborgvej 399, DK-4000 Roskilde (DK). **DANMARKS TEKNISKE UNIVERSITET** [DK/DK]; Afdeling for Forskning og Innovation, Anker Engelundsvej 1, Bygning 101A, DK-2800 Kgs.Lyngby (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WINTER-JENSEN, Bjørn** [DK/AU]; 233 Mt. Keira Road, Mt. Keira, NSW 2500 (AU). **WEST, Keld** [DK/DK]; Bengtassevej 2, 3th., DK-2900 Hellerup (DK).(74) Agent: **INSPICOS A/S**; Boge Allé 5, P.O. Box 45, DK-2970 Hørsholm (DK).

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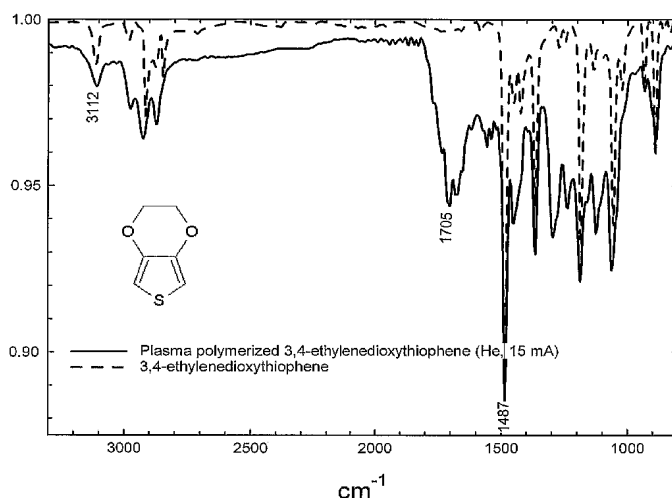
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(54) Title: PLASMA-POLYMERISATION OF POLYCYCLIC COMPOUNDS



(57) **Abstract:** The present invention relates to a method for the preparation of a layer of a plasma-polymerised material on the surface of a substrate, e.g. a substrate of a glass, an organosiloxane-based or polysiloxane-based material, silicon, fluoro-polymer (e.g. Teflon®), etc. The present invention also relates to novel objects and microstructured or micropatterned devices, e.g. by lift-off techniques, in particular such objects and devices that have layers of electrically conducting materials providing a conductivity of at least 0.01 S/cm. A feature of the invention is the plasma-polymerization of a compound including at least one polycyclic compound, said polycyclic compounds) comprising a non-aromatic heterocyclic ring fused to an aromatic or heteroaromatic ring or ring system. Examples of such compounds are 3,4-ethylenedioxythiophene (EDT), forming layers of poly(ethylenedioxythiophene) (PEDT), and piperonylamine, piperonyl chloride, safrole, 3,4-ethylenedioxy-pyrrole, 3,4-ethylenedioxy-N-methylpyrrole, and 3,4-methylenedioxythiophene.



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